

THE

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For the American Medical Intelligencer.

### ART. I.—CASE OF POISONING BY ERGOT.

*Philadelphia Hospital (Blockley), Sept. 27th, 1839.*

Dear sir,—The following letter and communication from Dr. John Beckwith, of Raleigh, N. C., upon the narcotic and poisonous properties of ergot, was received a few days since. Dr. Beckwith is one of the most distinguished physicians in the state. Should you deem this additional information to the experiments made by Dr. Cottman and myself to determine its sedative influence worthy of attention, you are at liberty to make use of it as you may think proper.

Very respectfully,  
W. H. McKee.

*To Professor Dunglison, M. D.*

Raleigh, Sept. 21, 1839.

*W. H. McKee, M. D.*

My dear sir,—In the number of Dunglison's Medical Intelligencer for Sept. 2d, I observe some experiments made by you, at the request of Dr. D., with the view to determine the narcotic properties of ergot. If you think the subjoined case will in any degree aid your enquiries, it is at your service.

With much respect, your friend,  
JOHN BECKWITH.

Mrs. —, a lady of our acquaintance in this city, aged 30, enjoying excellent general health, was taken in her fifth labour on the 8th of August last, and was induced to take thirty grains of ergot, a short time before the termination of a natural and easy parturition, for the purpose of restraining a real or supposed tendency to hemorrhage, after the expulsion of the placenta. Nothing remarkable occurred, and all went on very well till the lapse of an hour, when she began to complain of nausea and palpitation at the heart, and presently of dimness and confusion of sight. Vomiting was encouraged, and she threw up most of the ergot; the effect, however, continued and increased. The pulse, usually about 80, sank to about 40, with frequent intermission, and so continued through the night, (the article was taken at eight in the evening,) double vision soon followed, and then entire blindness. In two hours more delirium came on, succeeded by heavy sleep and snoring. She could be roused, not to consciousness, but to low muttering wanderings; temperature of the skin low, with free perspiration. Nearly this state of things continued till 8 o'clock next morning, when the hands, feet, ears, and nose, became purple, and much of the surface assumed a mottled aspect; then came on strong and general convulsions. When they subsided, her colour slowly returned, and from that time all the symp-

toms of poisoning gradually disappeared, and by evening she was decidedly out of danger. Through the day she complained much of soreness and tightness about the throat, and the tongue was a good deal swollen.

The memory was tardily recovered; almost every incident connected with her labour, even the birth of her child, was entirely forgotten. Throughout the past night, there was an extraordinary secretion of urine.

Beside vomiting, no remedies were employed, except vol. alkali, and strong counter-irritation; and subsequently a dose of castor oil. Her recovery is perfect.

I believe I have given all the circumstances of the case essential to your object, and leave the conclusions to be drawn from them to Dr. Dunglison and yourself.

## ART. II.—PROCEEDINGS OF THE MEDICAL SECTION OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

[We copy the following proceedings from the London Athenæum of August 31, 1839. The meeting of the Association was held at Birmingham on the 24th of August. It was not so numerously attended,—owing mainly, if not wholly, to political causes.—Ed.]

### SECTION E.—MEDICAL SCIENCE.

*President.*—DR. YELLOLY.

*Vice Presidents.*—DR. JOHNSTONE, DR. ROGET, DR. MACARTNEY.

*Secretaries.*—DR. G. O. REES, MR. F. RYLAND.

*Committee.*—DRS. BLAKISTON, BOOTH, G. BIRD, MR. W. S. COX, DRs. EVANS, FOVILLE, B. FLETCHER, HASTINGS, T. HODGKIN, MR. J. HODGSON, DRs. J. JOHNSTONE, PRITCHARD, MR. J. RUSSEL, DRs. R. S. SARGENT, VASE, MR. R. WOOD, DR. WALE.

After an introductory address from the president, one of the secretaries read a paper, communicated by Sir David Dickson, containing "Abstracts of a remarkable case of *Rupture of the Duodenum*, and of some other interesting cases."

R. H. was admitted into hospital on March 3d, at three o'clock P. M., and died before midnight. The symptoms were, severe pain in the region of the cæcum and ascending colon; hurried, restless manner; pale, haggard, and anxious countenance; short, hurried respiration; pulse weak, quick, and irregular. Depletion, followed by aperients, had been resorted to, without relief; leeching, fomentation, and warm purgatives, were resorted to without any relief, and, at half-past eleven, he sank. It was ascertained that he had been fighting and wrestling three days before, when he was thrown with violence on the breach of a gun. Post mortem examination discovered the following lesions:—The stomach, bowels, and abdominal cavity were filled with gas, the descending colon was much contracted; a quantity of ingesta had escaped from four perforations in the duodenum, the mucous and muscular coats of this gut were pellucid and attenuated, as having undergone ramollissement and absorption, in consequence of which the peritoneal coat seemed to have given way, from distention or mechanical violence; the other viscera seemed generally healthy. It is known, that sudden death frequently follows violent feats of tumbling and horse-manship, and, if examination were made, probably similar lesions would be found, or might exist without being detected, from the examination not being sufficiently minute; and thus this cause of death may more frequently occur than is generally supposed.

The next case detailed was one of *Neus*, with enormous distention of the

cæcum, which occupied the situation of the transverse colon. The usual symptoms of ileus were present—viz. obstinate constipation, stercoraceous vomiting, and singultus. The ileo-cæcal valve was much diseased, being thickened, and as hard as cartilage. The cæcum, which was forced upwards, had a black and sphacelated appearance, and was enormously distended. A strong membranous band, the product of previous inflammation, extended across the ileum, and firmly connected it with the meso-colon.

Another case was one of *intermittent coma* from diseased brain. This case was remarkable for the alternations of coma and excitement. The *post mortem* examination showed the arachnoid membrane to be opaque, and to be raised up from the brain by a gelatinous deposit. A considerable bloody effusion was found at the base of the brain, proceeding from the rupture of a true aneurism of the anterior artery of the cerebellum, near its junction with the basilar artery. The coats of the artery exhibited distinct ossific deposits: the cerebellum, on the left side, was wasted and softened in structure, and of the appearance of curdy pus. The aorta was found extensively invaded with ossific degeneration; scales of bone as large as a sixpence being separable from it, and its elasticity much impaired. Other cases of coma were detailed, in which depositions of a cartilaginous and tubercular nature were found in different parts of the brain. In a case of phthisis, the *foramen ovale* was found open; cyanosis did not exist; and the patient, a pensioner, had completed his due period of servitude, and had risen to the rank of sergeant, without suffering any inconvenience from the free communication between the right and left sides of the heart.

The next case was one of *Phlegmonous Erysipelas*, occupying the arm and thoracic muscles of the left side, and remarkable for its extreme rapidity. Two cases of severe abdominal disease were also detailed. In the last was observed an extensive deposit of semi-cartilaginous firmness, occupying the subserous cellular tissue; the calibre of the descending colon was so contracted, that, when cut across, it appeared as if encircled by a ring of "a dull white, yet glistening fish-like substance," fibriform, and from half an inch to upwards of an inch in thickness.

Mr. Middlemore read a brief notice of the methods that have been used for the removal of *capsular cataract*, where the opaque capsule remains after absorption of the lens, for the purpose of introducing to the Section an instrument to facilitate the operation of extraction, without interfering with the transparent structures of the eye. The instrument consisted of a needle, accompanied by a small forceps, the former capable of being withdrawn, leaving the latter to be fixed on the opaque membrane, and then withdrawn through the sclerotic, through which the needle had been introduced.

In answer to a question from Professor Macartney, Mr. Middlemore stated that he had not yet practically proved the efficiency of the instrument.

Mr. Middlemore detailed a case in which the *operation for artificial pupil* was performed with success, and presented the patient to the Section for examination. About three years ago much injury was done to the face from an explosion of gunpowder. After recovery of the other parts, the eyes were found to be in the following condition: the right was completely collapsed, the left was staphylomatous, the lens adhering to the staphyloma, but transparent; the lower half of the cornea was opaque, the upper half transparent, but vision destroyed, from the closed iris being opposite to the transparent portion of the cornea. The first effort was to remove the staphyloma, which was done by repeated puncturing of it with a fine needle. When the process of removal was so far completed as to permit the operation for artificial pupil, the iris was drawn through a small section of the cornea: it bled freely; but on the subsidence of the hemorrhage and irritation, a sufficient and well-defined opening was found in the iris opposite the transparent portion of the cornea. The external portion of the iris was allowed to remain strangulated by the incision. The patient has already in

a great degree recovered his sight, so as even to distinguish large print. He is still under treatment.

Dr. Foville (of Paris) presented a paper detailing the results of his researches on the *Anatomy of the Brain*. He commenced by urging the advantages of examining the structure of the brain by manual separation rather than by section, and gave credit to Willis, as being the first advocate of this method. He showed that the spinal marrow consists of two lateral portions, united by two commissures, between which, on the median line, there exists a double layer of white matter, analogous to the ventricle of the septum lucidum. He pointed out a remarkable difference of structure in the lateral parts of the spinal marrow, between the roots of the nerves, which is rendered most evident by maceration in water, after previous maceration in spirit. He next described the medulla oblongata. Tracing the crura cerebri to the brain, he showed them to consist of two parts,—the one going to the thalamus opticus, the other to the corpus striatum, where they constitute the white matter,—passing through the middle of those bodies, at the upper and outer limits of which they divide into three layers,—the superior passing upwards and inwards, meets its fellows on the median line, and forms the corpus callosum; the second, or middle, is expanded in the hemispheres, which it constitutes, by lining the cineritious matter of the convolutions; the third, or inferior, and by far the smallest layer, passes to the outer side of the thalamus and corpus striatum, meets its fellow inferiorly, and, ascending with it, forms the septum lucidum. In addition to these facts, he stated his more recent discovery, of several nearly circular systems of white fibres connecting the expansions of the superior part of the crus cerebri, which, from their connection with the olfactory and optic nerves, and also with the posterior part of the spinal marrow, appear to be essentially devoted to sensation. He also stated his fully confirmed observations, that the pathological affections of the thalamus influence the movements of the opposite side of the body, as those of the corpus striatum do those of the lower extremity. He noticed a similar connection between the lesions of the cornu ammonis and the motions of the tongue. He combated the idea, that the frontal, parietal, and occipital protuberances, are dependent on special development of the corresponding parts of the brain, but are rather to be attributed to the distention of corresponding parts of the ventricles. After the reading of the paper, Dr. Foville demonstrated the leading facts alluded to, on the recent brain.

Prof. Macartney said, that his own researches confirmed those connections of the fibres of the brain pointed out by Dr. Foville; but that a more extensive and minute connection between the different portions could be traced than those now demonstrated. He also stated, that the roots of the spinal nerves, by a beautiful plexus or net-work prolonged on the spinal column, formed its outer wall, and communicated with those spinal nerves above and below. Dr. Foville was aware of those more minute communications alluded to; but on the present occasion he did not attempt to give a complete exposition of the nervous system, as being unsuitable, from its great extent. Dr. Evans stated, that having seen Dr. Foville's pathological statements, as derived from his anatomical investigations in the "*Dictionnaire de Médecine*," he had minutely examined the cases reported by Lallemand, Rostan, and Andral, and found them to corroborate those views in almost every instance.

Prof. Macartney read a paper *On the Means of Repressing Hemorrhage from Arteries*. He stated that the barbarities practised by the older surgeons, such as burning and searing, instead of the ligature, proceeded from the adoption of the false theory, that a certain amount of inflammation was necessary to the healing process, and, although modern surgeons are easier satisfied, the theory has been preserved; the continental surgeons, however, insisting on a greater degree of inflammation than the British. Even the ordinary ligature, he observed, has been known to fail, from the injury and



consequent inflammation inflicted by it; to obviate this he was induced to try the effects of metallic ligatures, from observing that such substances frequently remained in the body without exciting any uneasiness. On applying ligatures of leaden wire to the arteries of dogs, he found, after death, that they remained *in situ*, without surrounding inflammation, or were removed by interstitial absorption, the arteries being impervious. The same results were observed when the experiment was made on the jugular veins of the rabbit. An improvement was made by Dr. Weiss on the leaden ligature, by substituting soft metal wire, capable of being knotted. He next alluded to the well-known fact of the closure of arteries in lacerated wounds; this he attributed to the rupture of the elastic coat and the elongation of the outer or cellular, so as to present merely a minute orifice, which was closed by coagulated blood, and not by the retraction of the artery, as Mr. Abernethy had supposed. In the treatment of stumps, he thought it a matter of doubt, what arteries must necessarily be tied, when the powers which nature possesses to repress hemorrhage be considered, and the cut surfaces be treated as an open wound, with cold applications. He related a case communicated to him lately by Mr. Darley, near Bray, in Ireland, in which, after amputation of the hand of a child, the stump was dressed with lint, kept wet with cold water, and *no ligature was applied or required*. This the professor deemed to be the first case on record, in which amputation was performed without the application of a ligature; he related another case, of severe wound of the thigh, in which the femoral artery was opened, and after some delay was tied, yet hemorrhage to a considerable amount recurred; nevertheless, by keeping the wound exposed, and cold (in the form of ice) applied, the bleeding was repressed, and the closure of the wound proceeded to a favourable termination.

Prof. Gibson, of Philadelphia, stated, that twenty-five years ago, Dr. Physic had introduced ligatures of leaden wire, influenced by the same considerations as Dr. Macartney. This he wished to state, not as detracting from the merit or originality of the learned professor's views, but as corroborating them. Mr. Hodgson agreed with Dr. Macartney, that inflammation was not necessary to the reparation of injuries, but he did not think that what Dr. Macartney called the modeling process, was the usual means nature adopted for the closing of arteries; but contraction. He thought metallic ligatures might prove injurious, from causing ulceration and sloughing of arteries in their progress through the body. He also objected to soluble ligatures, such as catgut, as liable to premature softening. Silk ligatures he thought injurious from their too long detention on the artery. Hemp, as in common twine, he deemed the best. He agreed with Dr. Macartney that the exposure of an artery promoted its contraction, but thought it might prove a dangerous experiment; experiments on healthy animals might lead to inferences not to be applied without danger to seemingly analogous cases of invalid patients. Prof. Macartney explained, that he did not advocate the metallic ligature in all cases. Dr. Wickenden detailed a case strongly supporting Dr. Macartney's opinions, as he thought. It was one in which amputation was performed on a patient, whose arteries were extensively ossified: attempts to fix ligatures repeatedly failed, yet by attending to the elevation of the stump, and the application of cold, serious hemorrhage was prevented.

Dr. Blakiston read a paper "*On the Sounds produced in Respiration, and on the Voice.*" He commenced by showing that the respiratory sound, coarse and intense when heard in the trachea, became weaker and softer as it approached the periphery of the chest, at which point the sound, during expiration, had almost totally disappeared. The air, in passing along the trachea and bronchial tubes, would meet with solid obstacles, and therefore be thrown into sonorous vibrations at every alteration of direction. The divergence of sound caused by the great subdivisions of those tubes, and the constant diminution in their calibre, would necessarily tend to soften and

weaken the respiratory sounds from the trachea towards the air vesicles. But the sounds produced by inspiration were carried up to the ear, placed on the chest, by the current of air during that act; while that produced by expiration was carried quite in a contrary direction: hence the difference in intensity. It was next shown, that bronchial respiration, occasioned by solidification of a portion of the lung, did not take place in the tubes leading solely to that portion, as had been supposed by Andral and Laennec, but that it took place in tubes leading to healthy expansible vesicles; and the ear being brought into contact with these tubes, perceived the coarse sound of the air passing and repassing in them. It was contended that no sensible part of the sound of vesicular respiration was produced in or around the vesicles, or by the rubbing of the pleura, otherwise it would be heard in expiration; nor in the mouth or fauces, otherwise stertorous breathing would increase its intensity, which it never does. The voice being an instrument of the membranous reed kind, Dr. Blackiston detailed a number of experiments which he had made with different kinds of pipes on the wind-chest of an organ, which led him to conclude that the quality of tone of wind instruments became uniformly more coarse and buzzing in proportion to the strength of the blast, and the thickness and elasticity of their sides; in other words, in proportion as the instrument itself entered into strong vibration. Some instances of the manner in which interference and jarring was produced between those solid vibrations of the instrument and those of the air contained in it, were then given. It was shown that both kinds of vibration were concerned in the formation of the voice; hence, when heard over the larynx, it was found to be coarse and intense; in proportion, however, as these vibrations traveled downwards towards the air vesicles, they were deadened, the aerial waves by the opposing current of expiration, and the solid ones, by the increasing mass of the non-homogeneous mass of the lungs; and at their periphery, no resonance of the voice could be detected. When, however, a portion of the lung became solidified, the current of expiration leading from it was stopped, and the spongy lung was transformed into a more homogeneous, and, therefore, a better conducting substance; hence the voice resounded strongly, and its quality became sometimes so coarse as to produce a tingling sensation in the ear.

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For the American Medical Intelligencer.

#### ART. I.—PHILADELPHIA HOSPITAL, (BLOCKLEY.)

DR. DUNGLISON, ATTENDING PHYSICIAN.

*Case of Pleuropneumonia, followed by extensive Gangrene of both Lungs.*

Reported by JOSEPH B. COTTMAN, M. D., Resident Physician.

Patrick Denny, æt. 38, labourer, born in Ireland, has been in this country thirteen years; parents always healthy; no hereditary disease in his family; intemperate; has always enjoyed good health until about seven years ago, when he had an attack of intermittent fever; got well in about nine months, and remained healthy until the 1st of April, 1839, when he was taken with cough; had no pain in the chest; became very weak in a short time, and was compelled to give up labour; had been at work for six or eight months in a tunnel; was often wet all day, and frequently, during the winter, his shirt would freeze to his back. Applied to a doctor, who gave him something that made him very sick; gradually grew worse until June the 11th, when he was admitted into the hospital labouring under bronchitis; entered Men's Medical Ward, No. 2; was there treated until the 2d of July, when he was discharged cured of his affection; there still remained some cough; a slight dulness on percussion under the right clavicle; and a difference in

the respiration of the two sides of the chest; went out on the farm to work, and caught cold; was again admitted into the hospital, August 11th, and entered Men's Medical Ward, No. 3.

*State.*—Emaciated; face flushed; general appearance very much attenuated since he left the hospital; respiration laboured; cough troublesome; complains of no pain; skin hot and dry; pulse 100, weak and feeble.

*Chest.*—An elevation as large as a goose's egg where the fifth and sixth cartilages on the right side join the ribs; can give no satisfactory account of the cause of it.

Percussion anteriorly, on the right side, flat in the upper portion; clear in the middle; dull in the lower. Anteriorly, on the left side, flat throughout.

Respiration, anteriorly, on the right side, bronchial in the upper portion; vesicular in the middle; feebly vesicular in the lower. Anteriorly, on the left side, rude at the summit; feebly vesicular throughout the remainder.

Posteriorly—The physical signs correspond to those anteriorly, except that the respiration at the summit of the left lung is heard more distinctly than anteriorly.

Impulse of heart greater than natural.

*Prescription.*—*Applicentur cucurbitulæ cruentæ iv. pectori. Capiat misturæ pectoralis, 3ss. secundâ quâque horâ. Farinaceous diet and ice internally.*

12th. Fever still continues; skin hot and dry; thirst very great; respiration much oppressed.

*Cucurbitulæ cruentæ iv. pectori.*

14th. Respiration easier; face flushed; skin hot and dry; pulse 120, quick and feeble.

10th. Emaciation has advanced since last note; cough pretty troublesome; expectoration very abundant and excessively fetid, mostly mucus; face pale; skin cold and moist; very weak; respiration oppressed.

3. *Chlorid calcis, grs. iv. tertiâ quâque horâ. Applicentur cucurbitulæ sicæ pectori; continetur mistura pectoralis, et habeat vini uncias quatuor in die.*

19th. Very much emaciated; has been vomiting frequently since last note; cannot retain any thing on his stomach; expectoration about two pints in the twenty-four hours; breath of a gangrenous odour, and so unpleasant that it is loathsome to examine the chest.

*Continuentur medicamina.*

21st. Patient is evidently sinking fast; and the odour exhaled by him so disagreeable that no one can go near him.

Died on the morning of the 22d August.

*Necropsy seventeen hours after death.*—Exterior: very much emaciated; a prominence where the fifth and sixth cartilages on the right side join the ribs. On opening the chest no particular lesion was found corresponding to the prominence; the pleura pulmonalis was adherent throughout to the pleura costalis. On the left side the adhesions could not be separated until the lung was removed from the chest; on the right side, the pleuræ were adherent about half way up from the base of the lung, the remainder bound together by bands of lymph.

One third of the upper lobe of the right lung was slightly emphysematous; a few miliary tubercles were scattered through it; the remainder was of a purple or greenish tint externally; when cut into, the tissue was softened, engorged with bloody serum, and presented numerous cavities of different sizes, some as large as a ten-cent piece, filled with a purulent matter, and very fetid. Some of these cavities were lined by a distinct false membrane, others were proceeding to ulceration; many of the smaller cavities appeared to be not distinct cavities, but merely distended vesicles, filled, however, with a matter similar to that contained in the larger: the middle and lower

lobes exhibited the same appearance; the bronchial tubes, on the right side, were very much enlarged, twice the natural size,—the larger of a pale pink colour, the smaller of a deep red, terminating in a distinct *cul-de-sac*. The bronchial glands were enlarged; colour natural; consistence soft.

The summit of the upper lobe of the left lung was emphysematous; the remainder healthy, except in a few spots at the lower portion, where gangrene had commenced, and the lung presented the same appearance as already described. The middle and lower lobes were in the same state as on the right side; the bronchial tubes were enlarged, their lining membrane slightly roughened, and of a rose-coloured tint; the bronchial glands were enlarged.

Heart natural size; posterior wall of left ventricle covered, in four distinct places, with patches of lymph.

Liver enlarged; one third above its natural size; tissue hardened; acini larger than natural.

Stomach: lining membrane very much injected throughout, particularly towards the pyloric orifice; intestines not examined.

J. B. COTTMAN.

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#### ART. IV.—CLINICAL OBSERVATIONS ON THE USE OF THE AIR-DOUCHE IN THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE EAR.

BY T. WHARTON JONES, ESQ.<sup>1</sup>

(Continued from page 198.)

[Some interesting cases of deafness, relieved by injections of water through the Eustachian tube, have been recently published by Dr. John Dix, of Boston. See Boston Medical Journal, Sept. 25, 1839, p. 105.—*Ed.*]

##### No. II.

In the case above related, the increase of the hearing power manifested from day to day was a warranty to persevere in the same treatment until improvement should, under its influence, go no further, or until the cure should be complete. The result was that the hearing rose to the common natural standard; the means of diagnosis becoming at the same time the means of cure. In the following case, the treatment by the air-douche was persevered in until the hearing on one side was raised to the natural standard, and on the other improvement would go no further.

**CASE II.**—Some affection of the auditory passages—Opacity of the left membrana tympani—Clogged state of the tympanic cavities from accumulated mucus—Eustachian tubes pervious.

Master C. D., betwixt 12 and 13 years of age, was brought to me by his mother, in the beginning of March, 1838, who stated her son had just been sent from school, being no longer able to go through his exercises on account of increasing deafness. The deafness, I was informed, had been first observed to come on after the measles, about four or five years ago. Is subject to catarrhal attacks in the nose and throat; has been under treatment without advantage.

The young gentleman could hear my watch with both ears at a distance only of an inch and a half. Thick lips; the nose broad at its root, and the state called epicanthus, *i. e.* folds of skin extending from the sides of the

<sup>1</sup> Lond. Med. Gaz. Aug 10, 1839, p. 717.



root of the nose over the inner canthi; together with an habitually loaded tongue and enlarged tonsils, were points in the constitution of the patient worthy of being noted.

On examining the auditory passages, I found them not stopped up, but scales of unhealthy wax adhering to the walls, and projecting into their interior, so as to prevent my obtaining a view of either membrana tympani.

*Prescription.*—Auditory passages directed to be syringed out every second night, and a solution of the acetate of lead (gr. iij. to ℥j) to be poured in two or three times a day.

Mrs. C. D. being anxious that her son should not be kept from his studies, especially as it was now so near the Easter holidays, when he would of course be at home for some time, he was allowed to return to school with the above prescription. Under its use the hearing improved so far that the scholastic exercises were gone through without marked impediment, which induced the master to write home, saying his pupil's hearing was restored.

Thursday, 12th April.—Has just returned from school to remain at home during the Easter holidays.

On examining the auditory passages I found them free; but at one or two places there was a small scab. The membrana tympani of the right side was pretty natural—perhaps only a little red. The membrana tympani of the left side was quite opaque, and presented large dark-coloured varicose vessels streaming through its substance. It was still sensible to the touch of a probe.

Saturday, 14th.—The hearing distance is now eight inches on the left side, and five inches on the right.

Introduced a catheter into the Eustachian tube of the right side, and blowing simply with the mouth, found it admitted the air. The hearing distance was immediately raised to seven or eight inches. The Eustachian tube of the left side impervious to a stream of air blown from the mouth.

Monday, 16th.—In consultation with Sir James Clark. Having stated the results of my examinations of the case, and that I believed there existed an accumulation of mucus in the tympana, which would require the employment of the air-douche to disperse, it was resolved, before having recourse to that, to exhibit some general remedies calculated to improve the state of the mucous membranes. The throat and tonsils being red and swollen, but not affected with any acute inflammation, were ordered to be penciled daily with a solution of lunar caustic.

Friday, 20th.—Hearing distance on right side nine inches; on left side eight inches.

Sunday, 22d.—Throat improving.

Monday, 23d.—Hearing distance on right side one foot and a half; on left side eleven inches and a half.

On another day in the course of this week the hearing distance had, on the left side, risen to one foot one inch and a half; but on the right side fallen as low as three inches and a half.

Saturday, 28th.—Hearing distance on both sides eleven inches and a half. To leave for school on Monday.

Saturday, 23d June.—Returned from school for the midsummer holidays. Hearing distance of the right ear about six or seven inches; of the left about twelve or thirteen inches.

Has had since last report, while at school, several attacks of ear-ache in the right ear.

*Prescription.*—To rub tartar emetic ointment behind this ear.

Monday, 2d July.—Hearing distance of the right ear about one foot; of the left ear fourteen or fifteen inches.

Friday, 6th.—Sent in a stream of air, by means of the air-press, through a catheter introduced into the right Eustachian tube, whereupon the hearing distance was raised to one foot eleven inches. Threw in a stream of air on

the left side, also, after which the hearing distance was increased to one foot eight inches and a half.

During these applications of the air-douche, I found that, on the left side, the air penetrated less freely, and with more gurgling, than on the right side.

The good result of the first essay with the air-douche in this case confirmed the diagnosis I had ventured to draw from my previous observations, especially from the examination made by blowing air through the catheter with the mouth simply, and emboldened me to pronounce a favourable prognosis, qualified only by this—that, considering the extent to which the left ear had suffered from inflammation, as indicated by the opaque and thickened state of the membrana tympani, it was not likely to be so much improved as the right, in which no marked organic change could be detected. This prognosis, though verified by the event, had like to have been contradicted by the unfavourable turn the case took during the three following days.

Saturday, 7th.—Had an attack of ear-ache in the right ear this morning, in consequence of which the hearing distance has fallen to fourteen inches. The left ear, however, has still further improved, viz. to two feet and a half.

Sunday, 8th.—Ordered to-day six or eight leeches, to be applied around the right ear; and the tartar emetic ointment, as prescribed on the 23d June, to be continued. Sweet oil to be dropped into the ear, which is to be syringed with lukewarm water at bed-time.

Monday, 9th.—The leeches have been applied, and the cheek is swollen in consequence. No return of ear-ache, but the hearing distance has fallen on the right side to three inches, and on the left side to eight inches.

Monday, 9th.—The leeches have been applied, and the cheek is swollen in consequence. No return of ear-ache, but the hearing distance has fallen on the right side to three inches, and on the left side to eight inches.

Introduced a catheter into the Eustachian tube of the left side without causing any pain, and applied the air-douche. The air entered with a rushing sound at first, and on increasing the force of the stream, with a gurgling sound. After this, the hearing distance was, on the left side, ten inches.

Friday, 13th.—No longer any tenderness of the ear. Hearing distance on the right side, fourteen inches; on the left side, one foot nine inches.

Applied the air-douche to the right ear, after which the hearing distance was raised to two feet.

Monday, 16th.—Right ear, two feet and a half; left ear, two feet.

Applied the air-douche to the left ear, by which the hearing distance was raised to two feet eight inches.

Tuesday, 17th.—Right ear, two feet eight inches; left ear, three feet.

Applied the air-douche to the right ear, after which the hearing distance rose to three feet nine inches and three quarters.

Wednesday, 18th.—Right ear, four feet two inches; left ear, two feet ten inches.

Applied the air-douche to the left ear, without any change in the hearing distance immediately resulting.

Thursday, 19th.—Right ear same as yesterday; left ear, three feet four inches.

Applied the air-douche to the right ear. The stream was allowed to be a little more powerful than usual, which caused some pain. A rushing sound was first heard, until the force of the stream was increased, when a gurgling noise became discernible. After the application of the air-douche the hearing distance of the right ear was found risen to six feet.

Friday, 20th.—Right ear six feet three inches; left ear, four feet eight inches.

In consequence of some tenderness of the left external ear, the air-douche was not applied to-day.

Monday, 23d.—Tenderness of the left external ear gone.

Hearing distance on the right side, seven feet eight inches and a half; on the left side, five feet eleven inches.

Applied the air-douche to the left ear, and immediately found the hearing distance only four feet eight inches; but on trying it again, in the course of a few minutes, it was found to have risen to seven feet and a half.

Tuesday, 24th.—Right ear, seven feet eight inches and three quarters; left ear, eight feet one inch and a half.

Applied the air-douche to the right ear. When the air enters the tympanum with moderate force, a rushing sound only is heard; but if with greater force, a gurgling noise is perceptible. A few minutes after the air-douche, the hearing distance was found to be nine feet four inches. On trying it again, after an interval of a few minutes, it was found to be almost twelve feet.

Wednesday, 25th.—Right ear, twelve feet eleven inches; left ear, nine feet one inch.

A few minutes after the application of the air-douche to the left ear, the hearing distance was eleven feet four inches. After an interval of five minutes from the first trial, the hearing distance was found risen to thirteen feet one inch and a half.

Thursday, 25th.—Right ear, fourteen feet three inches; left ear, ten feet and a half.

Applied the air-douche to the right ear. At first there was a gurgling, as if there was in the cavity of the tympanum thin loosened mucus. A rough rushing sound was afterwards heard, as if something vibrated within the tympanum, or as when one blows on a bit of gold-beater's skin, stretched between the fingers. This sound appears to be owing to vibration of the membrana tympani.

Hearing distance on the right side was now fifteen feet and a half, and in the course of five minutes had risen to sixteen feet five inches.

Friday, 27th.—Right ear, seventeen feet and a quarter; left ear, eleven feet eleven inches.

After the application of the air-douche to the left ear, the hearing distance of it was twelve feet five inches.

Saturday, 28th.—Right ear, eighteen feet four inches and a half; left ear, fourteen feet one inch and a half.

Air-douche applied to the right ear. The patient now hears the ticking of the watch distinctly, from one corner of the room to the other, a distance of about twenty-five feet.

Monday, 30th.—Hears with the right ear the watch, from one corner of the room to the other; left ear, fifteen feet and a quarter.

After the application of the air-douche to the left ear, the hearing distance was found risen to about eighteen feet.

Tuesday, 31st.—Left membrana tympani, though still opaque, does not appear so much thickened as before. It glistens more naturally than it did. The handle of the malleus may now be seen. The appearance of the right membrana tympani is pretty natural.

Hears the watch with the right ear distinctly, from one corner of the room to the other. Hearing distance of the left ear, fourteen feet five inches.

After the air-douche to the left ear, the hearing distance was about seventeen feet.

Thursday, August 2d.—Hears the watch distinctly with the right ear, from one corner of the room to the other, but did not hear it with the left ear at quite such a distance as the day before.

Applied the air-douche to the left ear without much change, the hearing distance remaining at only about fifteen feet.

Friday, 3d.—Right ear continues good; left ear hears the watch at the distance of sixteen feet four inches.



Saturday, 4th.—Dismissed cured, and is to go back to school on Monday. To guard against a relapse, it was directed, in addition to the general instructions regarding diet and regimen, which were obviously indicated, that in the event of ear-ache coming on again, leeches should be freely applied without loss of time, the ear fomented with warm water, and warm sweet-oil dropped in.

Saturday, 18th.—Received a letter from Mrs. C. D. to-day, in which she says her son is quite as well as when I saw him last; and although he had had a slight cold since, it had not in the least affected his hearing.

REMARKS.—In this case the principal cause of the deafness was accumulation of mucus in the tympanic cavities. There was no particular obstruction of the Eustachian tubes; it merely appears, that at first the Eustachian tube of the left side was impervious to a stream of air blown from the mouth; and that at the first application of the air-douche, the air penetrated less freely and with more gurgling than on the right. That the affection of the auditory passages had some share in the production of the deafness, was shown by the circumstance, that, when they were restored to a more healthy state, the hearing distance was raised to a few inches, and the susceptibility to the human voice very much improved; but unlike what occurred in the preceding case, the clogged state of the tympanum prevented improvement to any considerable extent. The increasing ratio in the progress of improvement, under the use of the air-douche, illustrates well both the nature of the principal cause and the efficiency of the means adopted for its removal. That hearing was not so fully restored on the left side as on the right, was owing to the opaque and thickened state of the membrana tympani, and possibly to a similar state of other parts of the ear not accessible to view.

As to the origin of the state of the ears.

The deafness, it is said, was first observed to come on after the measles. Both the eye and the ear, it is well known, are particularly obnoxious (especially in scrofulous constitutions) to what is called the *dregs* of the measles, as well as of the other exanthemata. Ophthalmia tarsi, scrofulous ophthalmia, chronic dacryocystitis, &c.—all diseases involving tegumentary structures, are very often excited by the measles, &c. The accessory parts of the ear being in like manner chiefly composed of the tegumentary tissue, readily participate in the various affections of the skin. In the case before us, I believe we have a counterpart of the diseases of the eye, excited by the same cause. The tegumentary lining of the auditory passages, with the ceruminous glands, were affected. Now this resembles, in many respects, that disease of the eye called ophthalmia tarsi. In both cases the structure affected being a tegumentary tissue in the transition from skin to mucous membrane; in the one connected with the ceruminous glands, and in the other with the Meibomian follicles.

But in addition to the affection of the tegument of the auditory passages, there was some affection of the mucous membrane lining the cavity of the tympanum, giving rise to the accumulation of mucus; an affection which might be compared to the scrofulo-catarrhal ophthalmia, or to chronic dacryocystitis, diseases, as above mentioned, often excited by measles, and often existing along with ophthalmia tarsi.

This comparison of the pathology of the case under consideration with morbid states of the accessory parts of the eye, excited by the same cause, indicates the propriety of employing the same general means of cure; but, as was pointed out in my former communication, in regard to some parts of the local treatment, what is easy of application to the eye requires a complicated apparatus for the ear.

Unfortunately, cases such as the above have a great tendency to relapse, either in consequence of the membrane—the seat of the disease—not being restored to a healthy action, and thus giving rise to a reaccumulation of mucus, or in consequence of a new attack of inflammation to which the part



will continue as liable as at first, or more so. This is not to be surprised at when we reflect on the difficulty of completely curing a chronic conjunctivitis, a chronic dacryocystitis, or even a chronic inflammation of the mucous membrane of the nose and throat; or the liability of these diseases, when cured, to fall back from the slightest causes.

Easter, C. D. came under my care again eight months after he was dismissed cured, for a renewal of deafness, brought on by repeated attacks of ear-ache while at school. No measures having been taken immediately to subdue the inflammation, the cautions and advice given when he was dismissed, having been entirely neglected, the membrane lining the tympanum has, I believe, become much changed in texture, so that the character of the disease is considerably different from what it was before.

The further history of the case will be given along with others treated with the vapours of acetic ether thrown into the tympanum.

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### BIBLIOGRAPHICAL NOTICES.

#### *Carpenter on the Physiology of the Nervous System.*<sup>1</sup>

To the author of this able essay, we alluded in our last number, when referring to the subject of the proposed Asylum for the Insane Poor of this Commonwealth. He is a learned physiologist, and the writer of several very valuable articles on the nervous system in the *British and Foreign Medical Review*. In those articles, the author did not regard the evidence adduced in favour of the views of Dr. Marshall Hall as to the existence of the excito-motory system of nerves, which we looked upon with favour,<sup>2</sup> to be sufficient. Since then, however, his farther examinations have produced some change in his sentiments.

The following are the author's general conclusions from a review of the ground passed over in his essay:—

"I. That a nervous system, in the form of connected filaments with ganglia on certain parts of them, exists in all animals, (that is, in all beings endowed with any degree of sensibility and voluntary power,) although its presence may not be detected by our means of observation.

"II. That the actions most universally performed by a nervous system are those connected with the introduction of food into the digestive cavity.

"III. That we have reason to regard this class of actions as every where independent of volition, and perhaps also of sensation;—the propulsion of food along the œsophagus in man being of this character.

"IV. That, for the performance of any action of this nature, a nervous circle is requisite, consisting of an *afferent* nerve, on the peripheral extremities of which an impression is made;—a ganglionic centre, where the white fibres of which that nerve consists terminate in gray matter, and those of

<sup>1</sup> Prize Thesis. Inaugural Dissertation on the Physiological Inferences to be deduced from the Structure of the Nervous System in the Invertebrated Classes of Animals. Submitted to the Medical Faculty of the University of Edinburgh, in conformity with the rules for graduation, by authority of the Very Rev. Principal Baird, and with the sanction of the *Senatus Academicus*. By William B. Carpenter, M. R. C. S., Late President of the Royal Medical and Physical Societies of Edinburgh, &c., and Candidate for the Degree of Doctor of Medicine. 8vo, pp. 83. (With two lithographs.) Edinburgh, 1839.

<sup>2</sup> Human Physiology, 3d edit. I. 73. Philadelphia, 1836.

the efferent nerve originate in like manner; and an *efferent* trunk conducting to the contractile structure the motor impulse, which originates in some change in the relation between the gray and white matter.

"V. That such actions may be regarded as the simplest of those which the nervous system performs, and most resemble the examples of contraction produced by the irritation of different organs in plants, (where an *impression* is mechanically conveyed by the circulating system,) of any which the animal kingdom affords.

"VI. That in the lowest animals such actions constitute nearly the entire function of the nervous system; the amount of those involving sensation and volition being very small.

"VII. That, as we ascend the scale, the evidence of the participation of true sensation in the actions necessary for the acquirement of food, as shown by the development of special sensory organs, is much greater; but that the movements *immediately* concerned with the introduction of food into the stomach remain under the control of a separate system of nerves and ganglia, to the action of which the influence of the cephalic ganglia,—the *special* if not the *only* seat of sensibility and volition,—is not essential.

"VIII. That, in like manner, the active movements of respiration are controlled by a separate system of nerves and ganglia, and are not dependent upon that of sensation and volition, though capable of being influenced by it.

"IX. That the centres of these systems are brought into closer structural relation with that of the sensori-volitional system as we ascend the scale of invertebrated animals; until they at last apparently become a part of it, as in vertebrata, where, however, they still remain really separate, and may be artificially insulated.

"X. That, whilst the actions of these systems are in the lower tribes almost entirely of a simply—reflex character, we find them, as we ascend, gradually becoming subordinate to the will; and that this is effected by the mixture of fibres proceeding directly from the cephalic ganglia with those arising from their own centres.

"XI. That the locomotive organs, in like manner, have their own centres of reflex action, which are independent of the influence of volition, perhaps also of sensation.

"XII. That the influence of the will is conveyed to them by separate nervous fibres, proceeding from the cephalic ganglia; and that similar fibres probably convey to the cephalic ganglia the impressions destined to produce sensations.

"XIII. That the stomato-gastric, respiratory, and locomotive centres are all united in the spinal cord of vertebrata, where they form one continuous ganglionic mass; and that the nerves connected with all these also receive fibres derived immediately from the cephalic ganglia.

"XIV. That whenever peculiar consentaneousness of action is required between different organs, their ganglionic centres are united more or less closely; and that the trunks themselves are generally connected by bands of communication.

"XV. That the sympathetic system does not exist in the lowest classes in a distinct form;—that the nervous system of the invertebrata, taken as a whole, bears no analogy with it;—that, as the divisions of this become more specialised, some appearance of a separate sympathetic presents itself;—but that this is never so distinct as in the vertebrata.

"XVI. Hence it may be inferred that, as the sympathetic system is *not* developed in proportion to the predominant activity of the functions of organic life, but in proportion to the development of the higher division of the nervous system, its office is not to "preside over" the former, but to bring them into relation with the latter; so that the actions of the organs of vegetative life are not dependent upon it, but influenced by it in accordance with the operations of the system of animal life.

*Rilliet and Barthez on the Pneumonia of Children.\**

This valuable treatise, for which the profession in this country will be indebted to Dr. Parkman for putting it into an English dress, will appear in the "Library," after the work of Trousseau and Belloc. The authors have investigated their subject pathologically according to the most approved methods, and their "Treatise" is a decided acquisition. It will be followed by other monographs, executed upon the same plan.

*Scoutetten on the Radical cure of Club-feet.†*

We expect to reprint the memoir of this skilful surgeon with its illustrations in the "Library." It has been translated by Dr. F. Campbell Stewart, of Williamsburg, Va., and will probably follow the work of Rilliet and Barthez. We may remark, by the way, that we have had an opportunity of seeing three of the cases operated upon by Dr. Mütter. The results are most satisfactory.

## MISCELLANEOUS NOTICES.

*Medical College of Philadelphia.*—The bill for the establishment of this college, which passed the legislature at the last session, has not yet, we believe, received the sanction of the governor—why, we know not.

*Pennsylvania Medical College.*—The Pennsylvania College at Gettysburg, has recently created a medical department to be situate in Philadelphia. The following are the Professors and subjects to be taught:—Dr. Samuel G. Morton, Anatomy and Physiology; Dr. George M'Clellan, Surgery; Dr. Wm. Rush, Theory and Practice of Physic; Dr. Samuel Colhoun, Materia Medica and Pharmacy; Dr. Samuel M'Clellan, Obstetrics and the Diseases of Women and Children; and Mr. Walter R. Johnson, Chemistry. The institution is advertised to open on the 4th of November.

*Western Journal of Medicine and Surgery.*—The accession of Dr. Drake to the Medical Faculty of Louisville, has given an impulse to journalism in the West, which has been recently flagging. The proprietors of the defunct Louisville Journal have purchased the subscription list of the asphyxied Western Journal of the Medical and Physical Sciences; and a new Phoenix is about to arise under the above title. We shall be most happy to see it succeed. There is talent and industry enough among the professors of the Louisville Medical Institute to effect this end; and we

\* A Treatise upon the Pneumonia of Children. By MM. Rilliet and Barthez, Hospital Internes, Members of the Anatomical Society at Paris. (With a motto.) Translated from the French by S. Parkman, M. D., Fellow of the Massachusetts Medical Society, and Member of the Boston Society for Medical Improvement.

† Mémoire sur la Cure radicale des Pieds-Bots, par H. Scoutetten, D. M. P., Professeur en Médecine, agrégé de la Faculté de Strasburg, &c., avec six planches. 8vo, pp. 119. Paris, 1838.

may hope, that a kindlier spirit towards men and institutions will be encouraged than we noticed in some of the periodicals of the West when in full circulation: The connection of a journal with a particular school is objectionable on this account. The editors feel compelled to be its champions; and whatever advantage may accrue to the school by such connection—and we believe it is small, if any—is counterbalanced by the injury done to themselves and through them to the profession by the uncharitableness which is thus apt to be engendered. If the editors of the new Western Journal avoid this rock, the undertaking, we think, can scarcely fail to succeed. If they do not, they scarcely merit success.

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*Jefferson Medical College of Philadelphia.*—The Professors, and the subjects taught, in this Institution, are as follows:—Jacob Green, M. D., Chemistry; Granville S. Pattison, M. D., Anatomy; John Revere, M. D., Practice of Physic; Robley Dunglison, M. D., Institutes of Medicine and Materia Medica; Robert M. Huston, M. D., Obstetrics and Diseases of Women and Children; and Joseph Pancoast, M. D., Surgery. Intimately connected as the editor is with this flourishing Institution, it may not be delicate for him to say much. He cannot do less, however, than assert his conviction, that it is adapted for a career of most useful exertion: under a lease of twenty years obtained on the building, with the right of pre-emption prior to the expiration of that period, the Trustees have instituted various improvements, which have rendered the accommodations for the purposes of a medical school all that is desirable. Of the qualifications of his new associates, who have succeeded to the Chairs of Surgery and Obstetrics, the editor speaks not only his own opinion, but that of all his colleagues, when he describes them to be ample, and to be founded on extensive opportunities for observing, studying, and practising their different branches; and he cannot doubt, that the courses they will deliver, will be signally effective. The October course of lectures has already commenced, and, from all appearances, it is probable, that the number of students, congregated in this city during the ensuing session, will be as large as, if not larger than, at any former period.

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*Pathological Society of Philadelphia.*—A society under this title has been recently established in this city. Its objects are—the exhibition of specimens of morbid anatomy, met with in hospital or private practice, and the collection and preservation of these specimens in a museum of pathological anatomy. The society is already *in esse*, and holds weekly meetings. Its officers are—W. W. Gerhard, M. D., *President*; C. W. Pennock, M. D. and T. Stewardson, Jr., M. D., *Vice Presidents*; Geo. W. Norris, M. D., *Secretary*; Edward Peace, M. D., *Treasurer*; and Paul B. Goddard, M. D., W. Pepper, M. D., and B. F. Hardy, M. D., *Curators*.

Instituted and supported by individuals so competent and zealous as the gentlemen mentioned, and their coadjutors, the society cannot fail to be conducted with spirit, and to tend to the advancement of pathological knowledge,—one of the elements of sound therapeutics, which, after all, is the great object of medicine.